

STUDIES ON THE COLEOPTERA OF THE PACIFIC  
NORTHWEST III: CARABIDAE: HARPALINAE.

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The specimens on which this study is based are in the collection of the author at the University of Washington.

**Platysma (Hypherpes) craterense**, sp. n.

Black, alutaceous, shining, the under surface and legs feebly picescent; pronotum about six-sevenths as long as wide, the sides entire, broadly arcuate, sinuate before the bluntly rectangular hind angles, the basal margin sinuate, margined towards the sides, the inner basal impression deep, linear, the region between it and the lateral margin usually tumid with the outer basal impression usually a more or less discrete foveiform impression; elytra with the striae deep, impunctate, the intervals feebly convex, the humeri feebly dentate, the apices beyond the lateral sinuation more or less feebly obliquely sinuato-truncate; prosternum margined at tip; metafemur unmodified in male, the posterior upper margin arcuate; last abdominal sternite unmodified, not carinate in male; aedeagus spinosely produced at apex; length 11–14 mm.

Type ♂ allotype ♀, and 18 paratypes: Crater L., Ore., June 28, 1934, M. H. Hatch. Three paratypes: McKenzie Pass, Ore., June 21, 1930, M. H. Hatch. One paratype, same data, McKenzie R. Single specimens lack the outer basal pronotal impression entirely or have it linear with the entire region between it and the inner impression broadly impressed. From related forms, *craterense* is usually distinguished by its obliquely sinuato-truncate elytral apex and the shape of its aedeagus; from the lowland *algidum* LeC. it is further distinguished by its dentate humeri and unmodified male metafemora; and from *brunneum* Dej. and *protractum* LeC. by the tumidity between the inner basal pronotal impression and the hind angle.

*Platysma (Hypherpes) scutellare* LeC. must be removed from the Oregon list (Schaupp, Bull. Brook. Ent. Soc. 1882, p. 40), since it does not occur north of Sonoma Co., Calif. (Van Dyke, Pan-P. Ent. II, 1925, p. 70).

**Platysma (Cryobius) shulli**, sp. n.

Body black, shining, not or very finely alutaceous, the lateral apical margin of the elytra very narrowly rufous or translucent, the ventral surface rufopiceous, the epipleurae and legs rufous,

mouthparts rufous, the extreme tip of the palpi flavous; antennae with the three basal segments rufous, the distal segments piceous, the apex of the last segment somewhat paler; pronotum about three-fourths as long as wide, moderately narrowed behind, the base nearly as wide as the apex, the side margins curving out almost immediately from the rectangular hind angles, transverse apical and transverse basal impressions present, the impressed median line nearly entire, the basal impressions bistriate, the outer stria less distinct, the striae coalescent behind forming a coarsely punctate narrow fovea, its floor slightly convex, the region between the fovea and the side margin feebly carinate, the entire hind angle rather strongly reflexed, the basal margin towards the hind angle finely to evanescently margined; elytra with eight entire moderately impressed not or vaguely punctate striae and an evident scutellar stria that has an ocellate puncture at its base, the intervals flat, the third stria with two dorsal punctures near the second stria; male with three basal protarsal segments dilated, the posterior margin of the last abdominal sternite with a single anal seta on either side, female with undilated protarsi and two anal setae; length 8-8.5 mm.

Type ♂ and allotype ♀: Pierce, Idaho, May 23, 1929, alt. 3200 ft., W. E. Shull, collector. Named for its collector, a well-known Northwestern entomologist. Distinguished from other species of *Cryobius* in the Northwest (*patulum* Csy., *laevilatum* Notm., *humidulum* Van D.) by the more strongly reflexed hind angles of the pronotum, the sides curving out almost directly from the hind angles.

***Amara* (s. str.) *san-juanensis* sp. n.**

Very convex; black, shining, impunctate, the upper surface aeneous, the elytra finely alutaceous, somewhat more opaquely so in the female, the antennae with the basal segments scarcely paler, the second and the third segments not carinate, the ventral surface and legs sometimes piceous; pronotum about three-fifths as long as wide, widest slightly in front of base, the apex about three-fifths as wide as the base, the sides broadly arcuate from the rounded slightly obtuse hind angles, the posterior seta-bearing puncture closer to the basal than to the lateral margin, the basal impressions consisting of a feeble foveiform outer and a feeble linear inner impression, the impressed median line attaining neither apical nor basal margin; elytral striae scarcely punctulate, finely impressed, the outer ones and the scutellar stria more finely and at times incompletely impressed, the scutellar stria without a seta-bearing puncture at its

base; prosternum at the middle in the male with a more or less evident punctate fovea, sometimes absent or evanescent, in the female unmodified; protibiae with terminal spur normally slender; femora with two setigerous punctures along inner margin; last abdominal sternite with one (male) or two (female) anal setae on either side along the apical margin; length 5.7–6.5 mm.

Type ♂, allotype ♀ and eight paratypes: San Juan Is., Wash., Brown's Is., July 30, 1933, M. H. Hatch. Two paratypes: San Juan Is., Wash. July 14, 1933; one paratype same data, July 8, 1933. One paratype: Van Horn, Wash. Apr. 28, 1930, A. D. Horn. From *insignis* Dej. and *insularis* Horn, to which this species runs in Hayward's (Trans. Am. Ent. Soc. XXXIV, 1908, p. 49) and Casey's keys (Mem. Col. VIII, 1918, p. 393), *santjuanensis* is distinguished by its smaller size and smaller number of femoral punctures.

***Amara (Celia) amplicollis* Mann. (*brunnea* Horn nec Gyll.).**

Washington specimens that correspond closely with Horn's description (Trans. Am. Ent. Soc. XIX, 1892, p. 39) of *brunnea* Gyll. differ from European specimens by their bluntly rectangular rather than obtusely rounded pronotal hind angles. Consequently I suggest the adoption for the present of Mannerheim's name for North-western material, even though his description (Bull. Soc. Imp. Nat. Moscou 1853, p. 139) calls somewhat ambiguously for hind angles "subrotundatis."

The variability in the shape of the mentum tooth in *amplicollis*, in *cxlineae* Minsk and Hatch, and in certain species of the *musculus*-group leads me to abandon the use of the subgenus *Acrodon* Zimm. (Minsk and Hatch, Bull. Brook. Ent. Soc. XXXIV, 1939, pp. 215–216) and to suggest that its species be incorporated in the *musculus*-group to some members of which they are very similar.

***Amara (Celia) wakelandi*, sp. n.**

Form oblong more than twice as long as broad; shining black or dark rufous, above finely alutaceous, scarcely more evidently so in female, the antennae and legs somewhat paler; pronotum from three-fifths to seven-tenths as long as wide, the apex about two-thirds as wide as the base, the apex from above feebly emarginate, the front angles broadly rounded, the side margins before the obtusely rounded hind angles slightly divergent and broadly evenly arcuate, the outer and inner foveae of the basal impressions well impressed and sparsely coarsely punctate, the surface between the

outer fovea and the side margin convex, the median line nearly entire; elytral striae entire, finely impressed, finely punctulate, the intervals nearly flat, the scutellar stria well developed and without an ocellate puncture at its base; below impunctate; male prosternum with a flattened area of fine punctures at the middle, unmodified in female, the apex of the prosternum margined and without setae; last abdominal sternite with two anal setae on either side along the posterior margin in both sexes; length 7-8 mm.

Type and two paratype males and allotype female: Succor Cr., Ida. 7-30-1926. Collector C. Wakeland. Distinguished from *rectangula* LeC. by the obtusely rounded hind angles and the more arcuate side margins of the pronotum and from *remotestriata* Dej. by the absence of setae from the apex of the prosternum. Named for its collector, Dr. Claude Wakeland, formerly connected with the University of Idaho.

#### ***Amara (Zezea) kincaidi* Minsk and Hatch.**

The original description (Bull. Brook. Ent. Soc. XXXIV, 1939, pp. 217-218) of this species erroneously reports two anal setae on either side along the posterior margin of the last abdominal sternite in both sexes. The males possess only one such seta, the females two.

#### ***Axinopalpus pratti*, sp. n.**

Piceous black, shining, finely alutaceous, the antennae, mouthparts, legs, median portions of the sterna, and an elytral fascia extending from the humerus about four-fifths the distance to the suture and about one-third the distance to the apex testaceous, the femora clouded with piceous; pronotum about three-fourths as long as wide, the base and apex equal in width, the hind angles obtuse, minute, the sides in front of the hind angles sinuate, the basal margin just within each hind angle arcuate and then sinuately continuous with the subtruncate basal lobe, the median line evident and connecting evident anterior and basal transverse impressions; elytra with striae finely evanescently impressed, the third interval with two dorsal punctures near the third stria, the apices evenly subtruncate, the sutural and outer apical angles rounded; length 3 mm.

*Type*: Coupeville, Wash., Sunnyside, June 29, 1944, M. H. Hatch. Named in honor of Mr. Robert Y. Pratt, at whose home I was a guest when the type was secured. Distinguished from *illectus* Csy. by its blunt pronotal hind angles.

***Axinopalpus denticulatus*, sp. n.**

Piceous, shining, finely alutaceous, the antennae, mouthparts, tibiae, tarsi, most of the ventral surface and oblique elytral fasciae extending from the humeri about half way to the apex and four-fifths the distance to the suture testaceous; pronotum about three-fourths as long as wide, the base and apex about equal in width, the hind angles rectangular, prominent, the sides in front of the hind angles sinuate, the basal margin just within each hind angle slightly oblique and then sinuately continuous with the subtruncate basal lobe, the median line evident and connecting the evident anterior and basal transverse impressions; elytra with the striae almost completely absent, with two dorsal punctures, the apices each with a minute acute spine just laterad to the sutural angle, the sutural and outer apical angle rounded; length 2.75 mm.

*Type*: Grand Coulee, Wash., Dry Falls, May 7, 1938, M. H. Hatch. Distinguished from other Nearctic species by the spinose elytral apices.

***Axinopalpus vittatus*, sp. n.**

Rufous, shining, very finely alutaceous, the following testaceous: mouthparts, antennae, legs, most of the ventral surface, hind angles of the pronotum, and oblique elytral vitta that extends from the humerus nearly four-fifths the distance to the apex of the elytra and about four-fifths of the distance to the suture, and a broad band along the anterior three-fourths of the lateral margin of the elytra; pronotum about three-fourths as long as wide, the base and apex equal in width, the hind angles subrectangular, minute, the side margin slightly sinuate in front of the hind angles, the basal margin within the angles slightly oblique and then sinuately continuous with the subtruncate basal lobe, median line evident and connecting the evident anterior and basal transverse impressions; elytra with the striae evanescent, the third interval with two fine dorsal punctures near the third stria, the apices evenly subtruncate, the sutural and outer apical angles rounded; length 3 mm.

*Type*: Seattle, Wash. (from the collection of O. B. Johnson). This species is most closely related to the Californian *demissus* Csy., from which it is distinguished by its paler color (which may be due to immaturity in the type), its more extensive elytral vittae, and perhaps by its less prominent posterior pronotal angles.

***Harpalus (Epiharpalus) affinis* Schrank (*viridiaeneus* Beauv.).**

I find no differences between American and European specimens.

This conclusion is based on a comparison of specimens from Austria, Czechoslovakia, Croatia, Massachusetts, Ontario, Michigan, and Washington, and includes a comparison of male genitalia. The species is widely distributed throughout the Palaearctic Region and may be native in North America, whence *viridiaeneus* was described in 1805. According to Reitter (*Fauna Germ. Käfer I*, 1908, pp. 172-173) and Csiki (*Col. Cat.* 121, 1932, pp. 1133-1135) the typical form *affinis* Schrank (= *confusus* Dej.) has the femora piceus, with the ab. *viridulus* Fourceroi (= *aeneus* F.) having the legs entirely pale. The aberrational name *semipunctatus* Dej. is applicable to specimens with the seta-bearing punctures extending over the inner as well as the two or three outer elytral intervals. Black or bluish specimens are assigned respectively to the ab. *melas* D. Torre (= *nigrinus* Schilsky) and the ab. *coerulescens* Schilsky, but I have seen neither of these varieties from America. Casey (*Mem. Col. V*, 1914, pp. 74-75) was in error in placing this species in the subg. *Harpalophonus* Gangl.

#### ***Harpalus (Amblystus) cascadiensis*, sp. n.**

Black, the lateral marginal beading of the pronotum obscurely rufous, the extreme bases of the legs and the tibiae and tarsi piceous, the antennae and mouthparts testaceous, dorsal surface shining and finely alutaceous in male, opaque and more coarsely alutaceous especially on the elytra in female; head from seven-tenths to three-fourths or more as wide as the pronotum; pronotum transverse, the apex about five-sevenths as wide as the base, the sides evenly broadly arcuate, the hind angles narrowly obtusely rounded, the sides very narrowly deplanate in front, behind the middle somewhat more widely so, with a single marginal seta in front of the middle, the surface finely punctulate, coarsely densely punctate at basal fourth and along marginal gutter, the apical and basal transverse impressions feeble, the basal impressions linear and rugose, the surface lateral to the basal impressions convex, the median impressed line fine and attaining neither anterior nor posterior margins; elytra with striae well impressed, entire, impunctate, the intervals nearly flat except towards apex, the third interval with two impressed dorsal punctures (rarely one or three on one side) behind middle near the second stria, the humeri finely dentate; mentum edentate; abdominal sternites four and five without accessory setae in addition to the single long seta on either side of middle; pro- and mesotarsi dilated in male, narrow in female; length 11-11.5 mm.

Type and 20 paratype males, allotype and 11 paratype females, Van Horn (Skagit Co.), Wash. Apr. 26, 1930, A. D. Horn. A single paratype female: S. Gabriola I., B. C. 9-11-1908. B. R. Elliott. This species runs to the *viduus*-group (= subg. *Pheuginus* Motsch.) in Casey's key (Mem. Col. V, 1914, p. 70) from which it is distinguished by its two dorsal punctures. The densely punctate hind angles and the broadly arcuate side margins of the pronotum place it in the subgenus *Amblystus* Motsch. (cf. Reitter, Fauna Germ. Käfer I, 1908, pp. 172, 174-175). Comparison of specimens of *cascadiensis* with specimens of various European species of the subg. *Amblystus* shows it to have a general facies that is quite congruent with a position in that subgenus. The two dorsal punctures of *cascadiensis* ally it with *quadripunctatus* Dej., which is distinguished by its slightly smaller size and usually pale legs.

#### **Harpalus (Pheuginus) atrichatus, sp. n.**

Dark rufous, shining, scarcely alutaceous, the elytra coarsely alutaceous in female, the antennae, the mid-ventral region, and the bases of the legs somewhat paler; head about three-fourths as wide as pronotum; pronotum about seven-tenths as long as broad, the apex about three-fifths as wide as the base, the sides arcuate in front, oblique in front of the obtusely narrowly rounded hind angles, not at all explanate, the anterior and posterior transverse impressions feeble and connected by the finely impressed median line, the region of the linear basal impressions diffusely variably punctate; elytra with striae impressed, entire, impunctate, the intervals flat, without a dorsal puncture (a single dorsal puncture present on third interval near second stria behind middle on one side in one of the six specimens seen), the humeri finely dentate, the apical sinus feeble; abdominal sternites four and five without accessory setae in addition to the single long seta on either side of middle; pro- and mesotarsi dilated in male, narrow in female; length 8-9 mm.

Type and paratype male, Ocean Park Wash., August 14, 1935. Allotype female, Friday Harb., Wash., 7/15 '24. Three paratype males: Bay Center, Easton, and Friday Harbor, Wash. This species runs to the *viduus*-group (= subg. *Pheuginus* Motsch.) in Casey's key (Mem. Col. V, 1914, p. 70) from other members of which it is distinguished by the usual absence of a dorsal puncture. The general shape and structure of the pronotum is likewise highly characteristic.

**Harpalus (Lasioharpalus) couleensis**, sp. n.

Black or dark rufous, the ventral surface and legs somewhat paler, the antennae testaceous, the margins of the pronotum and elytra narrowly translucently paler; upper surface shining, the elytra finely alutaceous, more finely so in male; head about two-thirds to seven-tenths as wide as pronotum; pronotum about two-thirds as long as wide, the apex about four-fifths as wide as the base, the apex in dorsal view nearly truncate, the side margins arcuate in front, nearly oblique and feebly convergent before the moderately arcuate hind angles, the sides with a narrow marginal gutter and not at all deplanate, the disc punctulate, sparsely punctate towards the hind angles, the basal impressions feebly impressed, the basal margin transverse, the hind angles not more posterior than the middle; elytra with the striae impressed, evanescently punctulate, the intervals feebly convex, the third interval with a single dorsal puncture behind the middle, the humeri finely dentate, the sutural angles narrowly rounded; mentum dentate; abdomen with sternites four and five with accessory setae forming conspicuous transverse lateral series in addition to scattered setae more antero-medially located; pro- and mesotarsi wider in male than in female; metatarsi with basal segment much shorter than fifth; length 7-9 mm.

Type male, allotype and three paratype females: Upper Grand Coulee, May 2, 1937, M. H. Hatch. Eight paratypes; Grand Coulee (Dry Falls), Electric City, Deadman Lake (Adams Co.), Neppel (Moses Lake), Kahlotus Lake, all in eastern Washington. Placed in the subgenus *Lasioharpalus* Reitt. (= *fraternus*-group of Casey) by the accessory setae on sternites four and five. It is related to *albionicus* Mann. and *obesulus* LeC. From these it is distinguished by its sparsely punctate posterior pronotal angles, and from *obesulus* by its more broadly rounded posterior angles. The legs and ventral surface are apparently darker than in *albionicus*.

*Harpalus* subg. **Cordoharpalus**, subg. n.

*Generitype*: *Harpalus cordifer* Notman = *washingtoniensis* Van D. Pronotum with the sides subparallel and then distinctly sinuate and distinctly widened in front of the sharp slightly obtuse hind angles, not flattened latero-basally, the hind angles densely punctate up to the lateral margin; elytra glabrous, without a dorsal puncture, the apical sinus dentate externally; mentum toothed; tarsi glabrous above; abdomen with sternites four and five without setae other



than the single seta on either side of the middle. Distinguished from other subgenera of *Harpalus* by its posteriorly sinuately narrowed pronotum.

Casey (Mem. Col. XI, 1924, p. 94) assigned *H. cordifer* to *Opa-dius* Csy., from which I distinguish it by the absence of serial punctures towards the apex of elytral intervals 3-5-7.

#### **Anadaptus idahoensis**, sp. n.

Piceous black, shining, the basal antennal segment paler, the upper surface aeneous or viridaeneous; head above set with coarse setigerous punctures; pronotum nearly three-fourths as long as wide, the apex nearly three-fourths as long as the base, the sides very narrowly reflexed, slightly more widely so towards hind angles, the hind angles narrowly rounded, in front of which the sides are oblique, the disc punctulate, the surface with coarse setigerous punctures towards the anterior and posterior margins especially in the anterior and posterior transverse impressions and in the moderately deep linear basal impressions, between the basal impressions and the side margin the surface is moderately convex; elytra shining and finely alutaceous in male, more opaquely alutaceous in female; intervals two, four, six, and eight densely set with setigerous punctures; intervals one, three, five, and seven convex, their axial portions more sparsely set with setigerous punctures in female, the punctures on these intervals in the male confined to the margins of the intervals except towards the apex; elytral apex strongly sinuate; thorax and abdomen below setulose, the thoracic side-pieces and the sides of the basal abdominal segments glabrous; length 8.5-10.5 mm.

Type male and allotype female: Sand Point, Id. June 20, 1937, Hortense Lanphere. Three paratype females Sand Point and Moscow, Id. Distinguished from *porosus* Mots. by its more densely punctate first, third, fifth, and seventh elytral intervals, the narrowly rounded posterior pronotal angles (subrectangular in *porosus*) in front of which the side margin is oblique (vaguely sinuate in *porosus*), the reflexed pronotal margins wider towards the hind angles (not widened in *porosus*).